

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

BURTON CHRISTENSEN, et al.

Group Art Unit: 1614

Application No.: 09/457,926

Examiner: Unassigned

Filed: December 8, 1999

For: NOVEL ANTIBACTERIAL AGENTS



**INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$240.00 (126) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A certification under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A certification under 37 C.F.R. § 1.97(e), a petition requesting consideration of the information disclosure statement, and the petition fee of \$130.00 (122) as set forth in 37 C.F.R. § 1.17(i) are also enclosed.
- ☐ Charge \$ _____ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \$ _____ is enclosed for the fee due.

Information Disclosure Statement Transmittal Letter

Application No. 09/457,926

Attorney's Docket No. 032367-449

Page 2

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R.

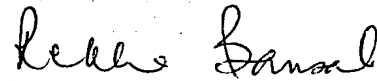
§§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit

Account No. 02-4800.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: _____



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Date: September 11, 2000

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

1. U.S. Patent No. 3,763,154, issued October 2, 1973, to Henniger.
2. U.S. Patent No. 3,904,616, issued September 9, 1975, to Sugimoto, et al.
3. U.S. Patent No. 3,981,865, issued September 21, 1973, to Salkawa, et al.
4. U.S. Patent No. 5,180,719, issued January 19, 1993, to White, et al.
5. U.S. Patent No. 5,273,973, issued December 28, 1993, to White, et al.
6. U.S. Patent No. 5,434,147, issued July 18, 1995, to White, et al.
7. U.S. Patent No. 5,447,913, issued September 5, 1995, to Ammons, et al.
8. U.S. Patent No. 5,491,139, issued February 13, 1996, to Demuth, Jr., et al.
9. U.S. Patent No. 5,530,116, issued June 25, 1996, to Demuth, Jr., et al.
10. U.S. Patent No. 5,637,580, issued June 10, 1997, to White, et al.
11. U.S. Patent No. 5,646,139, issued July 8, 1997, to White, et al.
12. U.S. Patent No. 5,648,346, issued July 15, 1997, to White, et al.
13. U.S. Patent No. 5,656,623, issued August 12, 1997, to White, et al.
14. U.S. Patent No. 5,693,791, issued December 2, 1997, to Truett.
15. International Publication No. WO 89/04313, published May 18, 1989.

16. International Publication No. WO 90/04594, published May 3, 1990.
17. International Publication No. WO 90/04595, published May 3, 1990.
18. European Patent No. 322810, published December 23 1988.
19. Albrect, HA. "Dual-action cephalosporins: Cephalosporin 3' quarternary ammonium quinolones." J. Med. Chem., 34:2857 (1991).
20. Corraz, A.J., et al. "Dual-action penems and carbapenems." J. Med. Chem. (1992)
21. Jhoti, H., et al. "X-ray crystallographic studies of a series of penicillin-derived asymmetric inhibitors of HIV-1 protease." 33, 8417 (1994)
22. Rodriques-Tebar, et al. "Labelling and cross-linking of E. coli penicillin binding proteins with β -lactam antibiotics." Eur. J. Biochem. 139, 287 (1984).
23. Snyder, N., et al. "SAR of carbacephalosporins and cephalosporins: Antibacterial activity and interaction with the intestinal proton-dependent dipeptide transport carrier of caco-2 cells." Antimicrob. and Chemother. 41:8, 1649 (1997).

The following documents were cited in the International Search Report for the related PCT Application No. PCT/US99/12776. A copy of the International Search Report is enclosed for the convenience of the Examiner.

1. International Publication No. WO 92/05802, published April 16, 1992.
2. Murata, et al. "Effect of Dimerization of the D-Glucose Analogue of Muramyl Dipeptide on Stimulation of Macrophagelike Cells." Carbohydrate Res. 297, 127-133 (1997).
3. Pitlik, et al. "Solution -Phase Synthesis of a Combinatorial Monocyclic β -Lactam Library: Potential Protease Inhibitors." Bioorg. Med. Chem. Lett. 7:24, 3129-3134 (1997).
4. Ruhland, et al. "Solid-Supported Combinatorial Synthesis of Structurally diverse β -Lactams." J. Am. Chem. Soc. 118, 253-254 (1996).
5. Shuker, et al. "Discovering High-Affinity Ligands for Proteins: SAR by NMR." Science, 274, 1531-1534 (1996).

The following documents were cited in the Written Opinion for the related PCT Application No. PCT/US99/12776.

1. U.S. Patent No. 4,816,582, issued March 28, 1989, to Furlenmeier, et al.
2. U.S. Patent No. 5,734,047, issued March 31, 1998, to Kim, et al.

3. Portoghese, Philip S. " The Role of Concepts in Structure-Activity Relationship Studies of Opioid Ligands." Journal of Medicinal Chemistry. 35:11, 1927-1937 (1992).

The documents are being submitted before the first Office Action on the merits, therefore, no fee or certification is required under 37 C.F.R. §1.97(b). In the event that an Office Action is mailed prior to receipt of this paper, the Commissioner is hereby authorized to charge the requisite fees under 37 C.F.R. § 1.97(c) for submission of this paper to Deposit Account No. 02-4800.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,
BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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